

What Is Claimed Is:

1. A conscious sedation system comprising:

a) a controller which generates a request for a predetermined hand grip response from a patient and which analyses at least a dynamic variable of a hand grip response made by the patient to the request to determine a level of sedation of the patient; and

b) a response testing apparatus including:

(1) a request assembly which communicates to the patient the request generated by the controller; and

(2) a response assembly which senses the dynamic variable of the hand grip response and which communicates the dynamic variable to the controller.

2. The conscious sedation system of claim 1, wherein a user and/or the controller determines a delivery schedule of a conscious-sedation drug to the patient based at least in part on the determined level of sedation of the patient.

3. The conscious sedation system of claim 1, wherein the response assembly senses a nerve signal sent by the brain of the patient to activate a muscle which is used by the patient to make the hand grip response.

4. The conscious sedation system of claim 1, wherein the response assembly includes a handpiece which is disposable in a hand of the patient, which senses the dynamic variable, and which communicates the dynamic variable to the controller.

5. The conscious sedation system of claim 4, wherein the handpiece senses the force of the hand grip response.

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6. The conscious sedation system of claim 4, wherein the handpiece includes a displacer, and wherein the controller at least analyzes at least one of the distance that the displacer is moved, the velocity of the displacer, and the acceleration of the displacer to determine the level of sedation of the patient.
7. The conscious sedation system of claim 6, wherein the displacer is a finger or thumb displaced plunger.
8. The conscious sedation system of claim 4, wherein the handpiece includes a force sensor, and wherein the controller at least analyzes at least one of the amount of force of the hand grip response and the time variation of the amount of force of the hand grip response to determine the level of sedation of the patient.
9. The conscious sedation system of claim 4, wherein the controller generates a feedback signal which is communicated to the patient when the hand grip response from the patient meets a predetermined criteria.
10. The conscious sedation system of claim 9, wherein the controller changes the predetermined criteria between two requests and at least analyzes the hand grip responses from the two requests to determine the level of sedation of the patient.
11. The conscious sedation system of claim 4, wherein the handpiece is adjustable to respond to one of a lower hand grip force and a higher hand grip force.
12. A response testing apparatus for a conscious sedation system comprising:

a) a request assembly which communicates to a patient a request generated by a controller of the conscious sedation system for a predetermined hand grip response from the patient; and

b) a response assembly which senses a dynamic variable of a hand grip response made by the patient to the request and which communicates the dynamic variable to the controller which analyzes at least the dynamic variable to determine a level of sedation of the patient.

13. The response testing apparatus of claim 12, wherein the dynamic variable is chosen from the group consisting of the amount of force of the hand grip response, the time variation of the amount of force of the time grip response, the distance of the hand grip response, the velocity of the hand grip response, and the acceleration of the hand grip response.

14. The response testing apparatus of claim 12, wherein a user and/or the controller determines a delivery schedule of a conscious-sedation drug to the patient based at least in part on the determined level of sedation of the patient.

15. A response assembly for a response testing apparatus for a conscious sedation system, wherein the response testing apparatus includes a request assembly which communicates to a patient a request generated by a controller of the conscious sedation system for a predetermined hand grip response from the patient, and wherein the response assembly comprises:

a handpiece which senses a dynamic variable of a hand grip response made by the patient to the request and which communicates the dynamic variable to the controller which analyzes at least the dynamic variable to determine a level of sedation of the patient.

16. The response assembly of claim 15, wherein the handpiece includes an electrical resistance sensor having two electrodes each contactable with the skin of the patient when the patient grips the handpiece, and wherein the skin exerts a variable pressure on the two electrodes during the hand grip response.

17. The response assembly of claim 16, wherein at least one of the two electrodes has a surface roughness between and including 10,000 and 50,000 micro-inches.

18. The response assembly of claim 15, wherein the handpiece includes an electrical capacitance sensor having two conductors, and wherein the hand grip response causes the distance between the two conductors to vary.

19. The response assembly of claim 15, wherein the handpiece includes a compliant air bladder, and wherein the controller analyzes at least the air pressure within the air bladder to determine the level of sedation of the patient.

20. The response assembly of claim 19, wherein the handpiece includes a pressure sensor which is disposed within the air bladder and which sends a signal to the controller corresponding to the air pressure within the air bladder.

21. The response assembly of claim 15, wherein the handpiece has a proximity sensor which detects the distance between two elements which changes as the handpiece is squeezed, and wherein the hand grip response causes the distance between the two elements to vary.